**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division**

LIMELIGHT NETWORKS, INC.,)
 	
    Plaintiff and Counterclaim)
    Defendant,)
v.)
 	
XO COMMUNICATIONS, LLC.,)
 	
    Defendant,)
 	
AKAMAI TECHNOLOGIES, INC.,)
 	
    Defendant and Counterclaim)
    Plaintiff,)
 	
MASSACHUSETTS INSTITUTE OF)
TECHNOLOGY,)
 	
    Counterclaim Plaintiff.)
)
	Case No. 3:15-cv-720-JAG
	
	JURY TRIAL DEMANDED

**AKAMAI TECHNOLOGIES, INC.'S
OPPOSITION TO LIMELIGHT NETWORK INC.'S MOTION TO STRIKE**

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I.   INTRODUCTION

Akamai Technologies, Inc. ("Akamai") respectfully requests that the Court deny

Limelight Networks, Inc.'s ("Limelight") motion to strike its infringement contentions with

respect to U.S. Patent No. 8,307,088 (the "'088 Patent") and U.S. Patent No. 7,472,178 (the "'178

Patent"). For each asserted claim of the '088 Patent and the '178 Patent, Akamai's First

Supplemental Preliminary Infringement Contentions ("Infringement Contentions") (1) specify

the Limelight product or products that Akamai alleges infringes the claim, (2) identify where

each claim element is located in the products, and (3) supply Akamai's basis for its contention

that the element is present. Notwithstanding Limelight's failure to produce the core technical

documents that it told the Court it would provide to Akamai by June 9, Akamai's Infringement

Contentions fully comply with the Court's Pretrial Order, clearly articulate Akamai's

infringement theories, and provide reasonable notice to Limelight of the basis for Akamai's

claims that Limelight infringes the '088 and '178 Patents. *See* Pretrial Order, D.I. 55.

Limelight's motion is merely a convoluted attempt to rehash its claim construction

arguments and put forth premature non-infringement arguments—which arguments, in fact,

demonstrate that Limelight is fully aware of the basis for Akamai's infringement allegations and

is able to respond accordingly. Accordingly, Limelight's motion to strike should be denied.

II.   BACKGROUND

On May 20, 2016, before receiving any documents from Limelight, Akamai served its

first Infringement Contentions based on information it obtained from public sources, including

Limelight's website and SEC filings. On May 27, 2016, Limelight filed a motion to bifurcate

Limelight's patent infringement claims and Akamai's patent infringement counterclaims into two

trials, or, in the alternative, to strike Akamai's contentions and compel amended contentions.

See D.I. 89. Shortly thereafter, on June 2, 2016, the Court held a telephone conference to discuss

Limelight's motion, particularly its challenge to the sufficiency of Akamai's Infringement

Contentions, which necessarily relied only on public information, as Limelight had not yet

responded to Akamai's discovery requests. As the Court will recall, during the conference,

Limelight represented that it would produce core technical documents for the accused Limelight

products on June 9, 2016. Accordingly, the Court denied Limelight's motion to bifurcate and/or

strike and permitted Akamai to serve amended infringement contentions after Limelight's June 9

production of core technical documentation. *See* Mem. in Supp. of Limelight's Mot. to Strike

Ex. 2, at 6:21-7:24, D.I. 114-2.

Limelight's production of core technical documentation, however, never materialized.

Inexplicably, on June 9, Limelight did not produce any documents. On June 10, counsel for

Akamai emailed Limelight inquiring after the missing document production. Ex. A. Limelight

responded that it had already produced all of its technical documents on May 31, before the

parties' telephone conference with the Court. Ex. B. Based on Limelight's representation to the

Court on June 2, however, Akamai believed Limelight would produce its core technical

documentation about the Limelight accused products on June 9. As noted, Limelight never did.

On June 17, 2016, Akamai again wrote to Limelight raising Limelight's failure to

produce core technical documentation relevant to Akamai's counterclaims. Ex. C. As this letter

details, Limelight had not—and to this date, has not—produced key documents relevant to the

products Akamai identifies as infringing the '088 and '178 Patents. The missing documents

include at least: (1) current versions of the user guides or instruction manuals for Limelight's

Orchestrate Platform and Orchestrate Storage; (2) configuration files for Limelight's servers and

the databases used in configuring Limelight's servers; and (3) technical documents describing

the design, structure, and operation of Limelight's Orchestrate Platform, Orchestrate Storage, and Limelight's Control and Configuration Manager.

Nonetheless, and relying on the small number of relevant high-level documents Limelight had produced, Akamai served supplemental Infringement Contentions in full compliance with the Court's order on June 17.

On June 20, 2016, Akamai received a letter from Limelight identifying what it alleged were new deficiencies in Akamai's Infringement Contentions for the '088 and '178 Patents. Limelight's letter also demanded, without basis, that Akamai withdraw its assertion of infringement of the '088 and '178 Patents. Limelight did not challenge the sufficiency of Akamai's contentions concerning the three other Akamai patents-in-suit. *See* Mem. in Supp. of Limelight's Mot. to Strike Ex. 5, D.I. 114-5. Akamai responded that its supplemental contentions as to the '088 and '178 patents are more than sufficient to put Limelight on notice of the basis for its claims even notwithstanding Limelight's limited production of technical documents. In response, Limelight filed the instant motion.

III.   THE COURT'S PRETRIAL ORDER

The Court's Pretrial Order requires that Akamai serve upon Limelight a claim chart that identifies: (1) which claims of Akamai's patents Akamai alleges Limelight's products infringe; (2) which specific Limelight products or methods infringe each asserted claim; and (3) where each element of each asserted claim is found in the Limelight products or methods, with Akamai's basis for its contention that the element is present. Pretrial Order ¶ 7(a), D.I. 55. The Court's Pretrial Order is appropriately designed to serve the discovery function of requiring Akamai to provide sufficient notice of its claims so that Limelight can mount a defense. Consistent with the principles of discovery mandated by the Federal Rules of Civil Procedure, the Pretrial Order does not require Akamai to make a complete evidentiary showing sufficient to

prove its case on the merits. Akamai will make that showing at trial. Limelight's motion is

premised on the false assumption that Akamai must do so now—even though the Court's Pretrial

Order has no such requirement. Rather, Akamai is only required to do what it has done—

namely, identify which claims of the '088 and '178 Patents Limelight infringes and where each

element of each asserted claim is found in the accused Limelight products and methods. No

more is required at this stage of the case.

Akamai is not aware of any case law in the Eastern District of Virginia discussing the

sufficiency of infringement contentions, and Limelight has cited none. The case law Limelight

purports to rely on interpret the Local Rules of Practice for Patent Cases before the United States

District Court of the Northern District of California. These rules, particularly the rules governing

infringement contentions, require more than the Court's Pretrial Order. Nevertheless, general

themes emerge from this case law that appear equally applicable here. Reasonable notice to the

defendant is the touchstone. *See Blue Spike, LLC v. Adobe Sys.*, No. 14-cv-01647-YGR (JSC),

2015 U.S. Dist. LEXIS 8778, at *13-14 (N.D. Cal. Jan. 26, 2015). A patentee is not required to

prove its infringement case and need only provide information if information is available to it.

Id. at *14. As the Northern District of California observed in *Blue Spike*, "the degree of

specificity" required under its local patent rules "must be sufficient to provide reasonable notice

to the defendant." *Id.* at *13.

> While the [local] patent rules do not require the disclosure of specific evidence
> nor do they require a plaintiff to prove its infringement case, . . . a patentee must
> nevertheless disclose what in each accused instrumentality it contends practices
> each and every limitation of each asserted claim to the extent appropriate
> information is reasonably available to it.

Id. at *14 (internal quotation marks omitted). The court also observed that flexibility in the level

of specificity required is important "given that there are times when [a] plaintiff's preparation is

restricted by defendants' sole possession of the information plaintiffs need." *Id.* at *19 (internal

quotation marks omitted). In *Bender v. Advanced Micro Devices, Inc.*, the court noted that,

generally, the purpose of preliminary infringement contentions is to "require the party claiming

infringement to crystallize its theories of the case early in the litigation and to adhere to those

theories once disclosed." No. C-09-1149 MMC (EMC), U.S. Dist. LEXIS 11539, at *2 (N.D.

Cal. Feb. 1, 2010).[1] As the following sections point out, Akamai's Infringement Contentions

satisfy both the Court's requirements in its Pretrial Order and these general standards articulated

by the Northern District of California.

IV.   AKAMAI'S INFRINGEMENT CONTENTIONS FULLY COMPLY WITH THE COURT'S PRETRIAL ORDER

Akamai's Infringement Contentions specifically identify, for each element of each

asserted claim of the '088 and '178 Patents, which Limelight products or methods infringe each

claim, where each element of these claims are located in the accused products, and Akamai's

basis for its contention, given the information available to Akamai, that the element is present in

a particular location in the accused Limelight product. Thus, they comply fully with the Court's

Pretrial Order.

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[1] These cases are distinguishable in all other respects. In each case, the court considered issues either specific to the Northern District of California's local patent rules or uniquely presented by the patentee's infringement contentions but not at issue here. *See O2 Micro Int'l, Ltd. v. Monolithic Power Sys.*, 467 F.3d 1355, 1366-68 (Fed. Cir. 2006) (affirming district court's conclusion that patentee was required to, but failed to, demonstrate diligence in seeking leave to amend as part of its "good cause" showing unique to the Northern District of California's local patent rules); *Blue Spike*, 2015 U.S. Dist. LEXIS 8778, at *19-22 (holding patentee's infringement contentions did not satisfy local rules and granting leave to amend because documents relied on by patentee either did not specifically discuss the accused product or discussed different products no longer at issue in the case); *Bender*, U.S. Dist. LEXIS 11539, at *2-4 (holding patentee's infringement contentions not in compliance with local rules and ordering amendment because patentee used representative claim charts and identified the accused products using broad labels like "Older Products").

A.   Akamai's '088 Patent

1.   *a computer system*

Limelight contends that Akamai fails to sufficiently identify the "computer system" claimed in claim 1 of the '088 Patent. However, Akamai's Infringement Contentions both identify the accused computer system and specify, to the extent appropriate given the information available to Akamai, where the element is located in Limelight Control, and the basis for Akamai's contention that the element is present.

Akamai's Infringement Contentions identify that "Limelight's Orchestrate Platform includes a computer system that supports, operates, or includes a customer web portal called Limelight Control or the Limelight Configuration Manager that facilitates integration of a customer's site into the Limelight CDN." Mem. in Supp. of Limelight's Mot. to Strike Ex. 1-C, at 7, D.I. 114-1.[2] As further support, Akamai provides a screenshot from Limelight's public website that shows that Limelight Control—which necessarily is an example of a "computer system" since it runs on the Internet and provides various display screens and functions— appears to facilitate integration of the content provider's content to Limelight's CDN:

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[2] Limelight contends that Akamai's allegation on "information and belief" that Limelight's Control platform infringes the '088 Patent is insufficient. Surprisingly, Limelight apparently holds Akamai to a different standard than it holds itself. In its infringement contentions for Limelight's U.S. Patent No. 8,615,577 (the "'577 Patent"), for example, Limelight contends that several claim elements are located in Akamai's Image Manager software solely on information and belief. *See* Ex. D, at 40 (contending solely "on information and belief" that Akamai's Image Manager satisfies element 9 of claim 1); *id.* at 52 (contending solely "on information and belief" that Akamai's Image Manager satisfies claim 4). By contrast, Akamai's Infringement Contentions specifically identify the documentary basis for its belief that the claimed element is present.
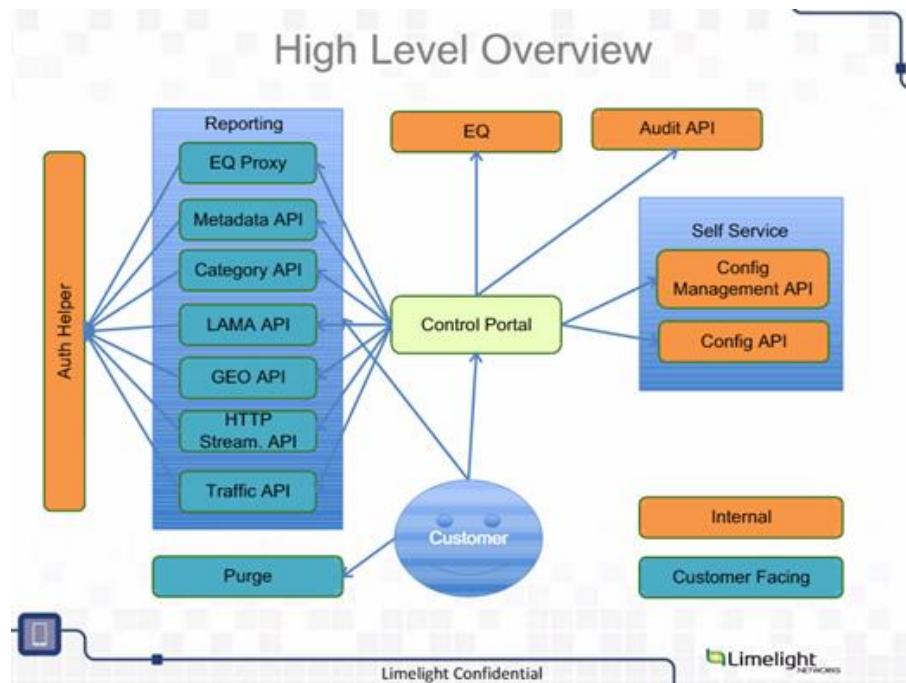
Id. at 10. As the Akamai Infringement Contentions explain, Limelight Control itself may be an

example of the recited "computer system" because it appears to provide the particular functions

asserted in the claim phrase. As depicted, the top of the screenshot shows that the portal guides

the customer through a series of seven steps to integrate content. At "Step Two – Basic

Configuration," the screenshot shows how a customer configures a URL to the Limelight CDN.

Id. The customer selects the protocol (HTTP, HTTPS, or both), the published hostname, and the

file path. *Id.* The customer can include the origin HTTP port number and host header value. *Id.*

The cited "High Level Overview" document further shows that Limelight's "Control Portal" is a

central, customer-facing feature of Limelight's CDN that is supported by a number of internal

"API" or application programming interfaces:

Id. at 8.

The output of the "DIG" query in Akamai's Infringement Contentions tie together the information currently known to Akamai about Limelight Control/Configuration Manager and the claimed CDN-specific domain name. The cited DIG query output shows that Limelight provides its customer with a Limelight-specific domain "llnwd.net." As the DIG shows, rather than receive a query to msnbc.com, the DNS receives a query to msnbc.vo.llnwd.net, the CDN-specific domain name assigned by Limelight to its customer for the customer's domain name msnbc.com *See id.* at 5 (describing that mycompany.hs.llnwd.net is a Limelight domain to which the customer "must CNAME, in order for Orchestrate Performance to deliver your website or application content"). Based on the information currently available to Akamai, Akamai understands that Limelight Control is where its customers' content is integrated into the Limelight CDN and where the configuration of customer accounts takes place. Accordingly, Akamai believes that Limelight's CDN necessarily includes a computer system that supports,

operates, or includes Control/Configuration Manager that generates the CDN-specific domain names that Limelight provides to its customers.

Limelight's motion asserts that Akamai's contentions are deficient because they point to the output of a "DIG" query that refers to Limelight's Domain Name System (DNS) as opposed to the "portal." *See* Mem. in Supp. of Limelight's Mot. to Strike 4, D.I. 114. This criticism misapprehends the nature of Akamai's contentions; Akamai relied upon the "DIG" query as circumstantial evidence that Limelight Control operates to provide the "CDN-specific domain name" of the claim element. Akamai was forced to rely on this circumstantial showing because Limelight has not produced the user guides or other documentation for the systems that support, operate, or include the Limelight Control/Configuration Manager. As a result, Akamai cannot show the output of Limelight Control, or any of the specific system(s) operating or supporting Limelight Control. Despite the limitations of Limelight's production of technical documents to date, however, Akamai nonetheless provides sufficient notice of the basis for its contention that a computer system that supports, operates, or includes Limelight Control generates CDN-specific domain names for Limelight customers to facilitate integration of their content into the Limelight CDN. *See Blue Spike*, 2015 U.S. Dist. LEXIS 8778, at *19 (recognizing that a plaintiff's contentions may be limited by the defendant's "sole possession of the information plaintiffs need").

Akamai's Infringement Contentions for this element clearly identify that the accused computer system is a computer system that supports, operates, or includes Limelight Control, which facilitates integration of a content provider's content into the Limelight CDN by, in part, receiving a domain name that is associated with the content provider's markup language page and that identifies the origin server associated with the content provider. The Infringement

Contentions for this element also show, via a DIG query output, that Limelight provides its customers with a CDN-specific domain name. Akamai contends that a computer system that supports, operates, or includes Limelight's control portal generates the Limelight CDN-specific domain in order to facilitate integration of the content provider's content and configuration of the content provider's accounts.

Based on the documents currently available to Akamai, its contentions for this element are more than sufficient to provide Limelight fair notice that Akamai accuses a computer system that supports, operates, or includes Limelight Control, as used in Limelight's CDN, of infringing this element, and Akamai's basis for this contention, on an element-by-element basis.

2. Limelight's Remaining Arguments Are Premature and Go To Non-Infringement, and Not the Sufficiency of the Contentions

Limelight's argument that a computer system supporting, operating, or including Limelight Control does not generate Limelight CDN-specific domain names because Limelight engineers manually create, assign, and transmit these domain names to Limelight's customers is a premature non-infringement argument on the merits. Moreover, this argument shows that, in fact, Limelight has a very clear picture of Akamai's infringement theory for this element of the '088 Patent. While Akamai disputes the notion that Limelight's control portal operates manually or that some manual operation is involved in the hostname configuration process, Limelight is on sufficient notice of the basis of Akamai's claim against it; stated another way, Limelight is free to make whatever non-infringement defense it chooses, but Akamai's Infringement Contentions – per se – are not deficient merely because Limelight disagrees with them on the merits. Whether a computer system that supports, operates, or includes Limelight Control generates CDN-specific domains for Limelight customers as Akamai contends—or whether Limelight engineers manually assign CDN-specific domain names to its customers' thousands of domain

names, as Limelight contends—is a question that will be decided on the merits at trial after the parties have completed discovery. At this stage, Akamai need not fully prove its infringement case. *See Blue Spike*, 2015 U.S. Dist. 8778, at *13. Rather, Akamai's burden is merely to identify where it contends each claim element is located in particular Limelight products and provide its basis for contending that the claimed element is present based on the documents and information currently available to it. Akamai has sufficiently done so. Therefore, the Court should deny Limelight's motion to strike Akamai's infringement contentions for the '088 Patent.

B. Akamai's '178 Patent

Limelight contends that Akamai does not sufficiently identify where each of the highlighted elements of claim 1 are located in Limelight's Orchestrate Platform and Limelight's Orchestrate Storage.

Akamai 178 Patent Claim 1 (excerpted)

For each of these elements, however, Akamai identifies, with as much specificity as possible given the information and documents currently available to Akamai, where the element is located in Limelight's products and the basis for Akamai's contention that the element is present.

> 1. *first CDN-specific hostname for use in association with the first content storage directory*

Akamai's Infringement Contentions use Limelight documents to identify two examples of the claimed CDN-specific hostname that Limelight provides to a participating content provider for use in association with the content provider's Limelight storage directory.

In example 1, Limelight's Orchestrate Performance End-to-End Guide specifically identifies "mycompany.hs.llnwd.net" as a Limelight CDN-specific hostname that Limelight provides to content providers that is associated with the content provider's content. Mem. in Supp. of Limelight's Mot. to Strike Ex. 1-E, at 7, D.I. 114-1; *see id.* at 19 ("Also included [in the Orchestrate Performance welcome letter] is the Limelight host to which you must CName, in order for Orchestrate Performance to deliver your website or application content").

In example 2, Limelight's CDN Structure Overview shows a CDN-specific hostname used in association with content storage. The CDN-specific hostname provided to the customer in this example is "customer.vo.llnw.net." *Id.* at 8. This document demonstrates that the content provider's uploaded files are given URLs that use the CDN-specific hostname "customer.vo.llnw.net" followed by a file path identifying the location of the particular file in the customer's storage directory, *e.g.*, "http://customer.vo.llnw.net/o1/sample_file.jpg." Another cited public document, ESG Lab Review: Limelight Orchestrate Storage, includes a particular customer's description of uploading content to Orchestrate Storage that matches example 2, which supports Akamai's contention that this element is located in Orchestrate Storage. *Id.* at 8-9. Thus, Akamai identifies in its Infringement Contentions that Limelight's Orchestrate Platform

and Orchestrate Storage use CDN-specific hostnames in association with a content provider's content storage directory.

>   2.   *first portion uniquely associated with the first participating content provider and second portion common to each of the first and second CDN-specific hostnames*

Akamai's Infringement Contentions also identify which portions of the two CDN-specific hostname examples, "mycompany.hs.llnwd.net" and "customer.vo.llnw.net," are the first portion uniquely associated with the content provider and which are the second portion common to the first and second CDN-specific hostnames. In example 1, "mycompany" is the "first portion uniquely associated with the first participating content provider. Likewise, in example 2, "customer" is the first portion uniquely associated with the first participating content provider. As the Orchestrate Performance End-to-End Guide Akamai cites describes, "[t]he 'mycompany' part of 'mycompany.hs.llnwd.net' tells the Content Delivery System which set of rewrites and rules to use for you." *Id.* at 28.

In example 1, the common second portion is "vo.llnw.net." In example 2, it is "hs.llnwd.net." These second portions are not customer specific like the first portions ("customer" and "mycompany"). Thus, Akamai's Infringement Contentions sufficiently identify the "first portion uniquely associated with the first participating content provider" and the "second portion common to each of the first and second CDN-specific hostnames."

>   3.   *value that identifies the first content storage directory*

Akamai's Infringement Contentions identify Akamai's basis for contending that Limelight's content storage directories have values that identify them, and that are associated with Limelight's CDN-specific hostnames. Akamai cites a version of Limelight's Agile Storage User Guide, which defines objects as "an individual piece of data or directory structure." The Agile Storage User Guide suggests that individual pieces of data or directory structures have

"object meta-data," which Limelight's documents define as "a collection of name-value pairs that describe various object qualities." *Id.* at 29. As best Akamai can discern based on the information Limelight has produced thus far, therefore, each storage directory has metadata, or a "value" that Limelight uses for identification.

4.   *DNS query associated with the first CDN-specific hostname*

Akamai's Infringement Contentions repeatedly show a DNS query associated with the first CDN-specific hostname. Akamai cites the Orchestrate Performance End-to-End Guide, which shows that customers are provided with a CDN-specific hostname, "mycompany.hs.llnwd.net," to which the customer "must CName, in order for Orchestrate Performance to deliver your website or application content." *Id.* at 24. Akamai also cites a DIG command output, which shows a DNS query associated with the CDN-specific hostname "msnbc.vo.llnwd.net." *Id.* at 25. Finally, Akamai cites Limelight's DEPLOY Technical White Paper, which shows that when an end-user is directed to content in Limelight's CDN at a CDN URL, the request "is routed to the customer's ISP's DNS. Based on records in that DNS, the request is then redirected (via CNAME and/or NS record) to the LLNW CDN DNS." *Id.* at 26. Thus, Akamai sufficiently identifies where this element is present in Limelight's Orchestrate Platform.

Based on the minimal documents currently available to Akamai, Akamai's Infringement Contentions for the '178 Patent are more than sufficient to provide Limelight fair notice of the basis for Akamai's '178 Patent claims. Again, Limelight's motion to strike actually is a premature challenge to the merits of Akamai's claims. Indeed, the specificity of Limelight's arguments demonstrate that it fully understands Akamai's claims from Akamai's Infringement Contentions. No more is required at this stage of the case. Limelight's motion to strike should be denied.

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V.   CONCLUSION

Limelight fully understands the basis of Akamai's infringement claims. Akamai's

Infringement Contentions likewise fully satisfy its obligation to identify which claims of its

patents it alleges are being infringed, which specific Limelight products Akamai alleges infringe

each claim, where each element of the asserted claims are found in Limelight's products, and

Akamai's basis for its contention that the element is present. Akamai's Infringement

Contentions comply fully with the Court's Pretrial Order, and Limelight's own non-infringement

arguments reflect the sufficiency of Akamai's Infringement Contentions. Thus, Limelight's

motion to strike should be denied.

Respectfully submitted,

AKAMAI TECHNOLOGIES, INC.

By its attorneys,

Dated: July 8, 2016

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<u>CERTIFICATE OF SERVICE</u>

I certify that counsel of record who are deemed to have consented to electronic service are being served on July 8, 2016, with a copy of this document via the Court's CM/ECF systems per Local Rule CV-5(a)(3). Any other counsel will be served by electronic mail, facsimile, overnight delivery and/or First Class Mail on this date.

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